

Abstract

In parallel computers, sorting and calculation of large-scale data are realized while large-scale data is held in the respective processors without sharing the large-scale data between the processors so as to reduce the communication between the processors. An information processing method gives global dimension value numbers common to all the processing modules to the dimension values for calculation, calculates measures for each of the dimension value numbers within the processing module, and lastly calculates measures commonly between all the processing modules. The value list and the pointer arrangement to the value list are locally held in each processing module and the order of the dimension values as a reference is globally held between processing modules. As a result it is possible to eliminate mutual access by processing modules for acquiring data required for calculation and only the data required for deciding the order of the dimension values is communicated between the processing modules.